DAIKIN

Air Conditioning

Technical Data

VRV IV heat pump

EEDEN13-200

RYYQ-T

TABLE OF CONTENTS

RYYQ-T

1 Features

- Customize your VRV for best seasonal efficiency & comfort with Variable Refrigerant Temperature
- Minimum of 25% higher seasonal efficiency with Variable Refrigerant Temperature when compared to previous series
- Best comfort, no cold draft by supply of a high outblow air temperature thanks to Variable Refrigerant Temperature and all inverter technology
- Continuous comfort: Unique continuous heating technology makes VRV IV the best alternative to traditional heating systems
- VRV configurator software for the fastest and most accurate commissioning, configuration and customisation
- Temperature control, fresh air provision, Biddle air curtains and hot water production all integrated in a single system
- Outdoor unit display for quick on-site settings and easy read out of errors together with the indication of service parameters for checking basic functions.
- Free combination of outdoor units to meet installation space or efficiency requirements
- Fits any building as also indoor installation is possible as a result of high external static pressure of up to 78.4 Pa. Indoor installation leads to less piping length, lower installation costs, increased efficiency and better visual aesthetics
- Simplified installation & guaranteed optimal efficiency with automatic charging & testing
- Easy compliance with F-gas regulation thanks to automated refrigerant containment check
- Wide piping flexibility: 30m indoor height difference, maximum piping length: 190m, total piping length: 1,000m
- The ability to control each conditioned zone individually keeps VRV® system running costs to an absolute minimum
- Spread your installation cost by phased installation
- Wide range of indoor units: combine VRV indoor units and stylish indoor units as Daikin Emura, Nexura ...
- Keep your system in top condition via our ACNSS service: 24/7 monitoring for maximum efficiency, extented lifetime, immediate service support thanks to failure prediction and a clear understanding of operability and usage
- Available as heating only by irreversible field setting

INVERTER

2 Specifications

2-1 Technical Specifications					RYYQ8T	RYYQ10T	RYYQ12T	RYYQ14T	RYYQ16T	RYYQ18T	RYYQ20T
Capacity range				HP	8	10	12	14	16	18	20
Cooling capacity	Nom.			kW	22.4 (1)	28.0 (1)	33.5 (1)	40.0 (1)	45.0 (1)	50.0 (1)	56.0 (1)
Heating capacity	Nom.			kW	25.0 (2)	31.5 (2)	37.5 (2)	45.0 (2)	50.0 (2)	56.0 (2)	63.0 (2)
Capacity control	Method				Inverter controlled						
Power input - 50Hz	Cooling	Nom.		kW	5.2 (1)	7.2 (1)	9.0 (1)	11.0 (1)	13.0 (1)	14.7 (1)	18.5 (1)
	Heating	Nom.		kW	5.5 (2)	7.4 (2)	9.1 (2)	11.2 (2)	12.8 (2)	14.4 (2)	17.0 (2)
EER					4.30 (1)	3.88 (1)	3.73 (1)	3.65 (1)	3.45 (1)	3.39 (1)	3.03 (1)
COP					4.55 (2)	4.27 (2)	4.12 (2)	4.02 (2)	3.92 (2)	3.88 (2)	3.71 (2)
Maximum number of connectable indoor units					64 (3)						
Indoor index connection	Min.				100	125	150	175	200	225	250
	Nom.				200	250	300	350	400	450	500
	Max.				260	325	390	455	520	585	650
Casing	Colour				Daikin White						
	Material				Painted galvanized steel plate						
Dimensions	Unit	Height		mm	1,685						
		Width		mm	930			1,240			
		Depth		mm	765						
	Packed unit	Height		mm	1,820						
		Width		mm	1,000			1,310			
		Depth		mm	835						
Weight	Unit			kg	254	261		-			
	Packed unit			kg	272	279		-			
Packing	Material				Carton						
	Weight			kg	2.00						
Packing 2	Material				Wood						
	Weight			kg	15.50			16.50			
Packing 3	Material				Plastic						
	Weight			kg	0.50			0	0.50		
Heat exchanger	Type				Cross fin coil						
	Fin	Treatment			Anti-corrosion treatment						
Fan	Type				Propeller fan						
	Quantity				1			2			
	Air flow rate	Cooling	Nom.	m^3/min	162	175	185	223	260	251	261
	External static pressure	Max.		Pa	78						
	Discharge direction				Vertical						
Fan motor	Quantity				1			2			
	Model				Brushless DC motor						
	Output			W	750						
Sound power level	Cooling	Nom.		dBA	-						
Compressor	Quantity				1			2			
	Model				Inverter						
	Type				Hermetically sealed scroll compressor						
	Crankcase heater			W	33						
Operation range	Cooling	Min.~Max.		°CDB	-5~43						
	Heating	Min.~Max.		°CWB	-20~15.5						
Refrigerant	Type				R-410A						
Refrigerant oil	Type				Synthetic (ether) oil						

2 Specifications

2-1 Technical Specifications					RYYQ8T	RYYQ10T	RYYQ12T	RYYQ14T	RYYQ16T	RYYQ18T	RYYQ20T
Piping connections	Liquid	Type			Braze connection						
		OD		mm	9.52		12.7			15.9	
	Gas	Type			Braze connection						
		OD		mm	19.1	22.2	28.6				
	Heat insulation				Both liquid and gas pipes						
	Piping length	OU - IU	Max.	m	165 (7)						
		After branch	Max.	m	90 (7)						
	Total piping length	System	Actual	m	1,000 (7)						
	Level difference	OU - IU	Outdoor unit in highest position	m	90 (7)						
			Indoor unit in highest position	m	90 (7)						
		IU - IU	Max.	m	30 (7)						
Defrost method					Reversed cycle						
Safety devices	Item	01			High pressure switch						
		02			Fan driver overload protector						
		03			Inverter overload protector						
		04			PC board fuse						
PED	Category				Category II						

Standard Accessories : Installation and operation manual;

Standard Accessories : Connection pipes;

2-2 Electrical Specifications				RYYQ8T	RYYQ10T	RYYQ12T	RYYQ14T	RYYQ16T	RYYQ18T	RYYQ20T
Power supply	Name			Y1						
	Phase			3N~						
	Frequency		Hz	50						
	Voltage		V	380-415						
Voltage range	Min.		%	-10						
	Max.		%	10						
Current	Nominal running current (RLA) - 50Hz	Cooling	A	7.2 (9)	10.2 (9)	12.7 (9)	15.4 (9)	18.0 (9)	20.8 (9)	26.9 (9)
Current - 50Hz	Minimum circuit amps (MCA)		A	15.0	22.0	24.0	27.0	31.0	35.0	39.0
	Maximum fuse amps (MFA)		A	20	25	30.0		35	40	45
	Total overcurrent amps (TOCA)		A	17.3	24.6		35.4		42.7	
	Full load amps (FLA)	Total	A	1.2	1.3	1.5	1.8	2.6		
Wiring connections - 50Hz	For power supply	Quantity		5G						
	For connection with indoor	Quantity		2						
		Remark		F1,F2						
Power supply intake				Both indoor and outdoor unit						

Notes

(1) Cooling: indoor temp. 27ºCDB, 19ºCWB; outdoor temp. 35ºCDB; equivalent piping length: 5m; level difference: 0m

(2) Heating: indoor temp. 20ºCDB; outdoor temp. 7ºCDB, 6ºCWB; equivalent refrigerant piping: 5m; level difference: 0m

(3) Actual number of connectable indoor units depends on the indoor unit type (VRV indoor, Hydrobox, RA indoor, etc.) and the connection ratio restriction for the system (50% \<= CR \<= 130%)

(4) For more details on operation range see TW drawing

(5) Voltage range: units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits.

(6) Maximum allowable voltage range variation between phases is 2%.

(7) Refer to refrigerant pipe selection or installation manual

(8) For more details on standard accessories refer to Installation/operation manual

(9) RLA is based on following conditions: indoor temp. 27ºCDB, 19ºCWB; outdoor temp. 35ºCDB

(10) MSC means the maximum current during start up of the compressor. VRV IV uses only inverter compressors. Starting current is always ≤ max. running current.

(11) Select wire size based on the value of MCA. The MCA can be regarded as the maximum running current.

2 Specifications

(12) MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker).

(13) TOCA means the total value of each OC set.

(14) FLA means the nominal running current of the fan

(15) Cooling: indoor temp. 27ºCDB, 19.0ºCWB; outdoor temp. 35ºCDB; equivalent piping length: 5m; level difference: 0m

(16) Cooling: indoor temp. 27ºCDB, 19ºCWB; outdoor temp. 35ºCDB; equivalent piping length: 5m (horizontal); level difference: 0m

2-3 Technical Specifications					RYYQ22T	RYYQ24T	RYYQ26T	RYYQ28T	RYYQ30T	RYYQ32T	RYYQ34T	RYYQ36T	RYYQ38T
System	Outdoor unit module 1				RYMQ10T7Y1B	RYMQ8T7Y1B	RYMQ12T7Y1B			RYMQ16T7Y1B			RYMQ8T7Y1B
	Outdoor unit module 2				RYMQ12T7Y1B	RYMQ16T7Y1B	RYMQ14T7Y1B	RYMQ16T7Y1B	RYMQ18T7Y1B	RYMQ16T7Y1B	RXYQ18T7Y1B	RYMQ20T7Y1B	RYMQ10T7Y1B
	Outdoor unit module 3				-								RYMQ20T7Y1B
Capacity range				HP	22	24	26	28	30	32	34	36	38
Cooling capacity	Nom.			kW	61.5 (1)	67.4 (1)	73.5 (1)	78.5 (1)	83.5 (1)	90.0 (1)	95.0 (1)	101.0 (1)	106.4 (1)
Heating capacity	Nom.			kW	69.0 (2)	75.0 (2)	82.5 (2)	87.5 (2)	93.5 (2)	100.0 (2)	106.0 (2)	113.0 (2)	119.5 (2)
Power input - 50Hz	Cooling	Nom.		kW	16.2 (1)	18.2 (1)	20.0 (1)	22.0 (1)	23.7 (1)	26.0 (1)	27.7 (1)	31.5 (1)	30.9 (1)
	Heating	Nom.		kW	16.5 (2)	18.3 (2)	20.3 (2)	21.9 (2)	23.5 (2)	25.6 (2)	27.2 (2)	29.8 (2)	29.9 (2)
EER					3.80 (1)	3.70 (1)	3.68 (1)	3.57 (1)	3.52 (1)	3.46 (1)	3.43 (1)	3.21 (1)	3.44 (1)
COP					4.18 (2)	4.10 (2)	4.06 (2)	4.00 (2)	3.98 (2)	3.91 (2)	3.90 (2)	3.79 (2)	4.00 (2)
Maximum number of connectable indoor units					64 (3)								
Indoor index connection	Min.				275	300	325	350	375	400	425	450	475
	Nom.				550	600	650	700	750	800	850	900	950
	Max.				715	780	845	910	975	1,040	1,105	1,170	1,235
Piping connections	Liquid	OD		mm	-								
	Gas	OD		mm	-								
	Piping length	OU - IU	Max.	m	165 (10)								
		After branch	Max.	m	90 (10)								
	Total piping length	System	Actual	m	1,000 (10)								
	Level difference	OU - IU	Outdoor unit in highest position	m	90 (10)								
			Indoor unit in highest position	m	90 (10)								
		IU - IU	Max.	m	30 (10)								
PED	Category				Category II								

Standard Accessories : Installation and operation manual;

Standard Accessories : Connection pipes;

2-4 Technical Specifications					RYYQ40T	RYYQ42T	RYYQ44T	RYYQ46T	RYYQ48T	RYYQ50T	RYYQ52T	RYYQ54T
System	Outdoor unit module 1				RYMQ10T7Y1B		RYMQ12T7Y1B	RYMQ14T7Y1B	RYMQ16T7Y1B			RYMQ18T7Y1B
	Outdoor unit module 2				RYMQ12T7Y1B	RYMQ16T7Y1B					RYMQ18T7Y1B	
	Outdoor unit module 3				RYMQ18T7Y1B	RYMQ16T7Y1B				RYMQ18T7Y1B		
Capacity range				HP	40	42	44	46	48	50	52	54
Cooling capacity	Nom.			kW	111.5 (1)	118.0 (1)	123.5 (1)	130.0 (1)	135.0 (1)	140.0 (1)	145.0 (1)	150.0 (1)
Heating capacity	Nom.			kW	125.0 (2)	131.5 (2)	137.5 (2)	145.0 (2)	150.0 (2)	156.0 (2)	162.0 (2)	168.0 (2)
Power input - 50Hz	Cooling	Nom.		kW	30.9 (1)	33.2 (1)	35.0 (1)	37.0 (1)	39.0 (1)	40.7 (1)	42.4 (1)	44.1 (1)
	Heating	Nom.		kW	30.9 (2)	33.0 (2)	34.7 (2)	36.8 (2)	38.4 (2)	40.0 (2)	41.6 (2)	43.2 (2)
EER					3.61 (1)	3.55 (1)	3.53 (1)	3.51 (1)	3.46 (1)	3.44 (1)	3.42 (1)	3.40 (1)
COP					4.05 (2)	3.98 (2)	3.96 (2)	3.94 (2)	3.91 (2)	3.90 (2)	3.89 (2)	
Maximum number of connectable indoor units					64 (3)							

2 Specifications

2-4 Technical Specifications					RYYQ40T	RYYQ42T	RYYQ44T	RYYQ46T	RYYQ48T	RYYQ50T	RYYQ52T	RYYQ54T
Indoor index connection	Min.				500	525	550	575	600	625	650	675
	Nom.				1,000	1,050	1,100	1,150	1,200	1,250	1,300	1,350
	Max.				1,300	1,365	1,430	1,495	1,560	1,625	1,690	1,755
Piping connections	Liquid	OD		mm	-							
	Gas	OD		mm	-							
	Piping length	OU - IU	Max.	m	165 (10)							
		After branch	Max.	m	90 (10)							
	Total piping length	System	Actual	m	1,000 (10)							
	Level difference	OU - IU	Outdoor unit in highest position	m	90 (10)							
			Indoor unit in highest position	m	90 (10)							
		IU - IU	Max.	m	30 (10)							
PED	Category				Category II							

Standard Accessories : Installation and operation manual;

Standard Accessories : Connection pipes;

2-5 Electrical Specifications				RYYQ22T	RYYQ24T	RYYQ26T	RYYQ28T	RYYQ30T	RYYQ32T	RYYQ34T	RYYQ36T	RYYQ38T
Current	Nominal running current (RLA) - 50Hz	Cooling	A	22.9 (4)	25.2 (4)	28.1 (4)	30.7 (4)	33.5 (4)	36.0 (4)	38.8 (4)	44.9 (4)	44.3 (4)
Current - 50Hz	Minimum circuit amps (MCA)		A	46.0		51.0	55.0	59.0	62.0	66.0	70.0	76.0
	Maximum fuse amps (MFA)		A	60			70			80		90
Wiring connections - 50Hz	For power supply	Quantity		5G								
	For connection with indoor	Quantity		2								
		Remark		F1,F2								
Power supply intake				Both indoor and outdoor unit								

Notes

(1) Cooling: indoor temp. 27ºCDB, 19ºCWB; outdoor temp. 35ºCDB; equivalent piping length: 5m; level difference: 0m

(2) Heating: indoor temp. 20ºCDB; outdoor temp. 7ºCDB, 6ºCWB; equivalent refrigerant piping: 5m; level difference: 0m

(3) Actual number of connectable indoor units depends on the indoor unit type (VRV indoor, Hydrobox, RA indoor, etc.) and the connection ratio restriction for the system (50% \<= CR \<= 130%)

(4) For more details on operation range see TW drawing

(5) Voltage range: units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits.

(6) Maximum allowable voltage range variation between phases is 2%.

(7) Refer to refrigerant pipe selection or installation manual

(8) For more details on standard accessories refer to Installation/operation manual

(9) RLA is based on following conditions: indoor temp. 27ºCDB, 19ºCWB; outdoor temp. 35ºCDB

(10) MSC means the maximum current during start up of the compressor. VRV IV uses only inverter compressors. Starting current is always ≤ max. running current.

(11) Select wire size based on the value of MCA. The MCA can be regarded as the maximum running current.

(12) MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker).

(13) TOCA means the total value of each OC set.

(14) FLA means the nominal running current of the fan

(15) Cooling: indoor temp. 27ºCDB, 19.0ºCWB; outdoor temp. 35ºCDB; equivalent piping length: 5m; level difference: 0m

(16) Cooling: indoor temp. 27ºCDB, 19ºCWB; outdoor temp. 35ºCDB; equivalent piping length: 5m (horizontal); level difference: 0m

2-6 Electrical Specifications				RYYQ40T	RYYQ42T	RYYQ44T	RYYQ46T	RYYQ48T	RYYQ50T	RYYQ52T	RYYQ54T
Current	Nominal running current (RLA) - 50Hz	Cooling	A	43.7 (4)	46.2 (4)	48.7 (4)	51.4 (4)	54.0 (4)	56.8 (4)	59.6 (4)	62.4 (4)
Current - 50Hz	Minimum circuit amps (MCA)		A	81.0	84.0	86.0	89.0	93.0	97.0	101.0	105.0
	Maximum fuse amps (MFA)		A	90	100			110		125	

2 Specifications

2-6 Electrical Specifications			RYYQ40T	RYYQ42T	RYYQ44T	RYYQ46T	RYYQ48T	RYYQ50T	RYYQ52T	RYYQ54T
Wiring connections - 50Hz	For power supply	Quantity	5G							
	For connection with indoor	Quantity	2							
		Remark	F1,F2							
Power supply intake			Both indoor and outdoor unit							

Notes

(1) Cooling: indoor temp. 27ºCDB, 19ºCWB; outdoor temp. 35ºCDB; equivalent piping length: 5m; level difference: 0m

(2) Heating: indoor temp. 20ºCDB; outdoor temp. 7ºCDB, 6ºCWB; equivalent refrigerant piping: 5m; level difference: 0m

(3) Actual number of connectable indoor units depends on the indoor unit type (VRV indoor, Hydrobox, RA indoor, etc.) and the connection ratio restriction for the system (50% \<= CR \<= 130%)

(4) For more details on operation range see TW drawing

(5) Voltage range: units are suitable for use on electrical systems where voltage supplied to unit terminal is not below or above listed range limits.

(6) Maximum allowable voltage range variation between phases is 2%.

(7) Refer to refrigerant pipe selection or installation manual

(8) For more details on standard accessories refer to Installation/operation manual

(9) RLA is based on following conditions: indoor temp. 27ºCDB, 19ºCWB; outdoor temp. 35ºCDB

(10) MSC means the maximum current during start up of the compressor. VRV IV uses only inverter compressors. Starting current is always ≤ max. running current.

(11) Select wire size based on the value of MCA. The MCA can be regarded as the maximum running current.

(12) MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth leakage circuit breaker).

(13) TOCA means the total value of each OC set.

(14) FLA means the nominal running current of the fan

(15) Cooling: indoor temp. 27ºCDB, 19.0ºCWB; outdoor temp. 35ºCDB; equivalent piping length: 5m; level difference: 0m

(16) Cooling: indoor temp. 27ºCDB, 19ºCWB; outdoor temp. 35ºCDB; equivalent piping length: 5m (horizontal); level difference: 0m

2-7 Technical Specifications					RYMQ8T	RYMQ10T	RYMQ12T	RYMQ14T	RYMQ16T	RYMQ18T	RYMQ20T
Casing	Colour				Daikin White						
	Material				Painted galvanized steel plate						
Dimensions	Unit	Height		mm	1,685						
		Width		mm	930			1,240			
		Depth		mm	765						
	Packed unit	Height		mm	1,820						
		Width		mm	1,000			1,310			
		Depth		mm	835						
Weight	Unit			kg	181	188		-			
	Packed unit			kg	199	206		-			
Packing	Material				Carton						
	Weight			kg	2.00						
Packing 2	Material				Wood						
	Weight			kg	15.50			16.50			
Packing 3	Material				Plastic						
	Weight			kg	0.50			0	0.50		
Heat exchanger	Type				Cross fin coil						
	Fin	Treatment			Anti-corrosion treatment						
Fan	Type				Propeller fan						
	Quantity				1			2			
	Air flow rate	Cooling	Nom.	m³/min	162	175	185	223	260	251	261
	External static pressure	Max.		Pa	78						
	Discharge direction				Vertical						
Fan motor	Quantity				1			2			
	Model				Brushless DC motor						
	Output			W	750						
Compressor	Quantity				1			2			
	Model				Inverter						
	Type				Hermetically sealed scroll compressor						
	Crankcase heater			W	33						
Operation range	Cooling	Min.~Max.		ºCDB	-5~43						
	Heating	Min.~Max.		ºCWB	-20~15.5						

2 Specifications

2-7 Technical Specifications			RYMQ8T	RYMQ10T	RYMQ12T	RYMQ14T	RYMQ16T	RYMQ18T	RYMQ20T
Refrigerant	Type		R-410A						
Refrigerant oil	Type		Synthetic (ether) oil						
Piping connections	Heat insulation		Liquid, gas and equalizing pipe						
Safety devices	Item	01	High pressure switch						
		02	Fan driver overload protector						
		03	Inverter overload protector						
		04	PC board fuse						

2-8 Electrical Specifications				RYMQ8T	RYMQ10T	RYMQ12T	RYMQ14T	RYMQ16T	RYMQ18T	RYMQ20T
Power supply	Name			Y1						
	Phase			3N~						
	Frequency		Hz	50						
	Voltage		V	380-415						
Voltage range	Min.		%	-10						
	Max.		%	10						
Current	Nominal running current (RLA) - 50Hz	Cooling	A	7.2 (9)	10.2 (9)	12.7 (9)	15.4 (9)	18.0 (9)	20.8 (9)	26.9 (9)
Current - 50Hz	Minimum circuit amps (MCA)		A	15.0	22.0	24.0	27.0	31.0	35.0	39.0
	Maximum fuse amps (MFA)		A	20	25	30.0		35	40	45
	Total overcurrent amps (TOCA)		A	17.3	24.6		35.4		42.7	
	Full load amps (FLA)	Total	A	1.2	1.3	1.5	1.8	2.6		
Notes				FLA means the nominal running current of the fan						

3 Options

3 - 1 Options

RYYQ-T
RXYQ-T
RYMQ-T

No.	Item.	RXYQ8T RYYQ8T	RXYQ10-12T RYYQ10-12T	RXYQ14-18T RYYQ14-18T	RYYQ20T RYYQ22-54T RXYQ20T RXYQ22-54T
1	COOL/HEAT SELECTOR	KRC19-26A6			
2	FIXING BOX	KIB111A			
3	REFNET HEADER	KHRQ22M29H			
		---	KHRQ22M64H		
		---	---	---	KHRQ22M75H
4	REFNET JOINT	KHRQ20M20T			
		KHRQ22M29T9			
			KHRQ22M64T		
		---	---	---	KHRQ22M7ST
5	OUTDOOR MULTI CONNECTION KIT (see note 3)	---	---	---	BHFQ22P1007
6	OUTDOOR MULTI CONNECTION KIT (see note 3)	---	---	---	BHFQ22P1517
7	VRV CONFIGURATOR	EKPCCAB1			
8	DIGITAL PRESSURE GAUGE KIT	BHGP26A1 (see note 2)			

NOTES

1. All options are kits.
2. In case of multi outdoor unit installation only 1 option per installation is needed.
3. Only for multi units

3D079531

4 Combination table

4 - 1 Combination Table

RYYQ-T
RXYQ-T
RYMQ-T

↱ See **Notes** concerning base model type

		RXYQ8* RYMQ8*	RXYQ10* RYMQ10*	RXYQ12* RYMQ12*	RXYQ14* RYMQ14*	RXYQ16* RYMQ16*	RXYQ18* RYMQ18*	RXYQ20* RYMQ20*
Heat PUMP	RXYQ8* / RYYQ8*	1						
	RXYQ10* / RYYQ10*		1					
	RXYQ12* / RYYQ12*			1				
	RXYQ14* / RYYQ14*				1			
	RXYQ16* / RYYQ16*					1		
	RXYQ18* / RYYQ18*						1	
	RXYQ20* / RYYQ20*							1
Multi combination with 2 outdoor units	RXYQ22* / RYYQ22*		1	1				
	RXYQ24* / RYYQ24*	1				1		
	RXYQ26* / RYYQ26*			1	1			
	RXYQ28* / RYYQ28*			1		1		
	RXYQ30* / RYYQ30*			1			1	
	RXYQ32* / RYYQ32*					2		
	RXYQ34* / RYYQ34*					1	1	
	RXYQ36* / RYYQ36*					1		1
Multi combination with 3 outdoor units	RXYQ38* / RYYQ38*	1	1					1
	RXYQ40* / RYYQ40*		1	1			1	
	RXYQ42* / RYYQ42*		1			2		
	RXYQ44* / RYYQ44*			1		2		
	RXYQ46* / RYYQ46*				1	2		
	RXYQ48* / RYYQ48*					3		
	RXYQ50* / RYYQ50*					2	1	
	RXYQ52* / RYYQ52*					1	2	
	RXYQ54* / RYYQ54*						3	

NOTES

RYYQ* = single continuous heating model
RYMQ* = multi continuous heating model
RXYQ* = non-continuous heating model (single & multi)

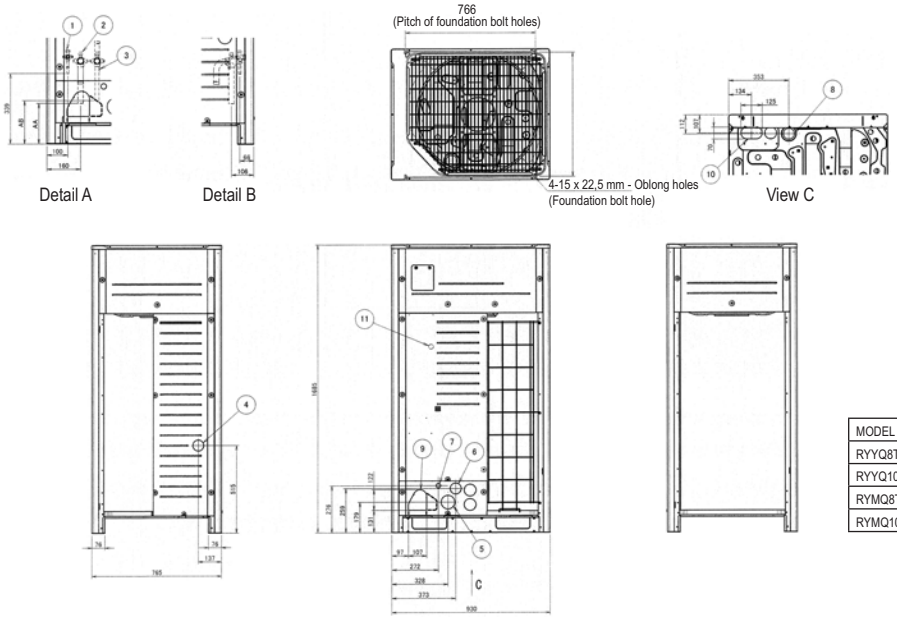
1. Single unit can be chosen: RYYQ* model (continuous heating) and RXYQ* model (non-continuous heating)
2. Multi combinations “non-continuous heating” consist out of RXYQ* modules. Eg RXYQ36* = RXYQ16* + RXYQ20*
3. Multi combinations “continuous heating” consist out of RYMQ*modules. Eg RYYQ36* = RYMQ16* + RYMQ20* → multi models RYMQ* cannot be used as stand alone units (RYMQ8~20HP)
4. Multi combinations can never contain RYYQ*models

3D079534

5 Dimensional drawings

5 - 1 Dimensional Drawings

RYYQ8-12T
RXYQ8-12T
RYMQ8-12T



MODEL	AA	AB	AC
RYYQ8T, RXYQ8T	248	-	-
RYYQ10-12T, RXYQ10-12T	195	-	-
RYMQ8T	248	208	240
RYMQ10-12T	195	208	240

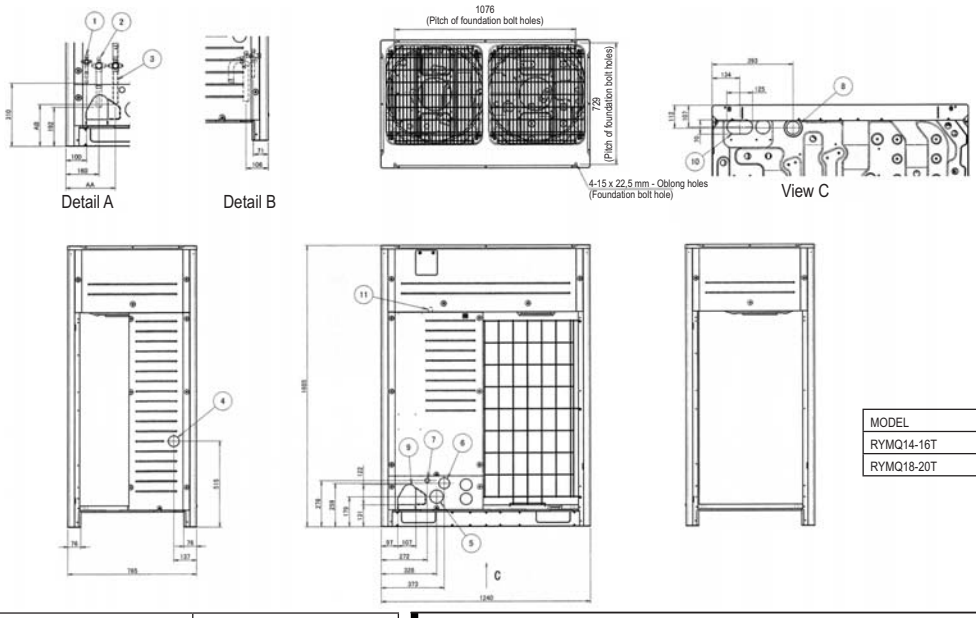
2D079532

No.	Parts name	Remarks
1	Liquid pipe connection port	See note 3
2	Gas pipe connection port	See note 3
3	Equalizing pipe connection port	See note 3
4	Power cord routing hole (side)	ø 65
5	Power cord routing hole (front)	ø 80
6	Power cord routing hole (front)	ø 65
7	Power cord routing hole (front)	ø 27
8	Power cord hole (bottom)	ø 65
9	Pipe routing hole (front)	
10	Pipe routing hole (bottom)	
11	Grounding terminal	Inside of switch box (M8)

NOTES

1. Detail A and detail B indicate the dimensions after fixing the attached piping.
2. Items 4 tot 10: knock out hole.
3. Gas pipe:
   Ø 19.1 brazing connection: RYYQ8T, RYMQ8T, RXYQ8T
   Ø 22.2 brazing connection: RYYQ10T, RYMQ10T, RXYQ10T
   Ø 28.6 brazing connection: RYYQ12T, RYMQ12T, RXYQ12T
   Liquid pipe:
   Ø 9.5 brazing connection: RYYQ8-10T, RYMQ8-10T, RXYQ8-10T
   Ø 12.7 brazing connection: RYYQ12T, RYMQ12T, RXYQ12T
   Equalizing pipe:
   Ø 19.1 brazing connection: RYMQ8-10T
   Ø 22.2 brazing connection: RYMQ12T

RYYQ14-20T
RXYQ14-20T
RYMQ14-20T



MODEL	AA	AB
RYMQ14-16T	240	205
RYMQ18-20T	240	210

2D079533

No.	Parts name	Remarks
1	Liquid pipe connection port	See note 3
2	Gas pipe connection port	See note 3
3	Equalizing pipe connection port	See note 3
4	Power cord routing hole (side)	ø 65
5	Power cord routing hole (front)	ø 80
6	Power cord routing hole (front)	ø 65
7	Power cord routing hole (front)	ø 27
8	Power cord hole (bottom)	ø 65
9	Pipe routing hole (front)	
10	Pipe routing hole (bottom)	
11	Grounding terminal	Inside of switch box (M8)

NOTES

1. Detail A and detail B indicate the dimensions after fixing the attached piping.
2. Items 4 tot 10: knock out hole.
3. Gas pipe:
   Ø 28.6 brazing connection: RYYQ14-20T, RYMQ14-20T, RXYQ14-20T

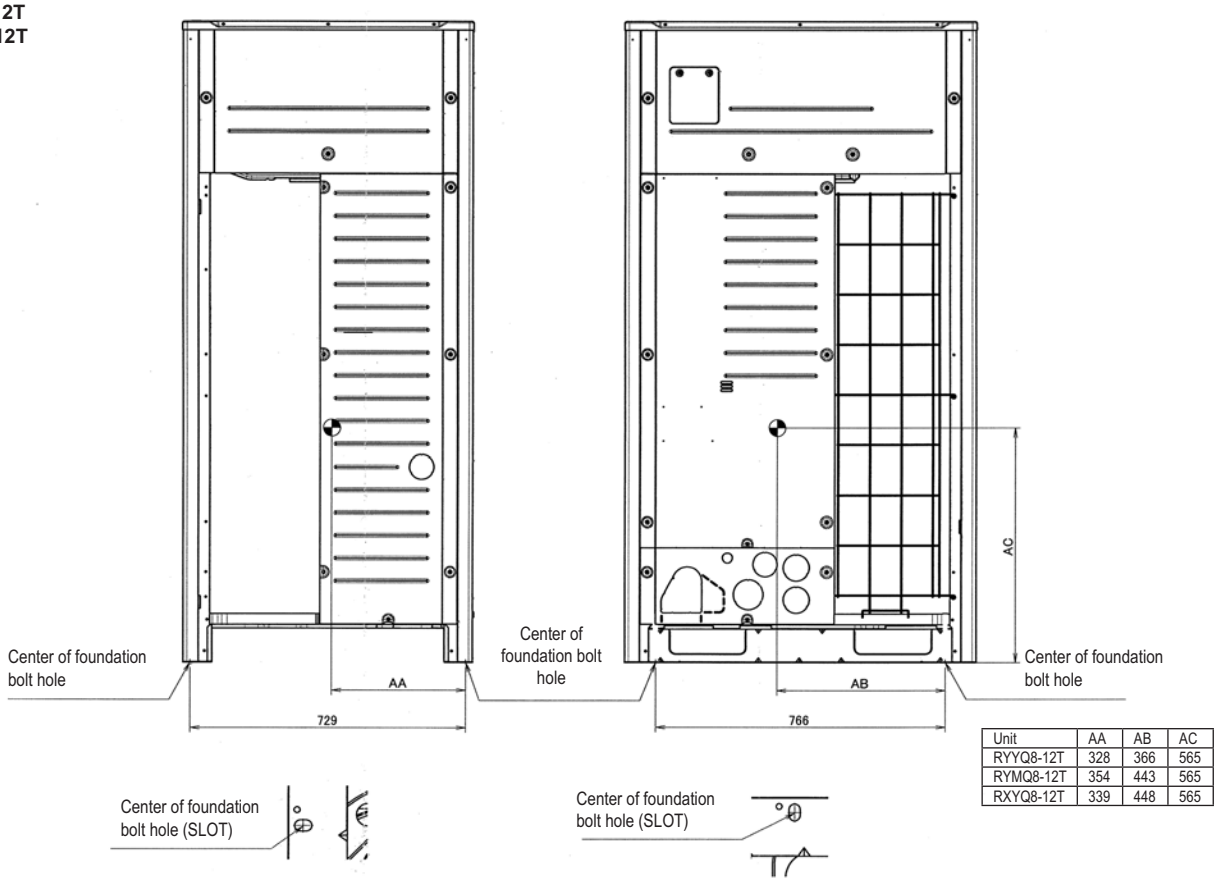
   Liquid pipe:
   Ø 12.7 brazing connection: RYYQ14-16T, RYMQ14-16T, RXYQ14-16T
   Ø 15.9 brazing connection: RYYQ18-20T, RYMQ18-20T, RXYQ18-20T

   Equalizing pipe:
   Ø 22.2 brazing connection: RYMQ14-16T
   Ø 28.6 brazing connection: RYMQ18-20T

6 Centre of gravity

6 - 1 Centre of Gravity

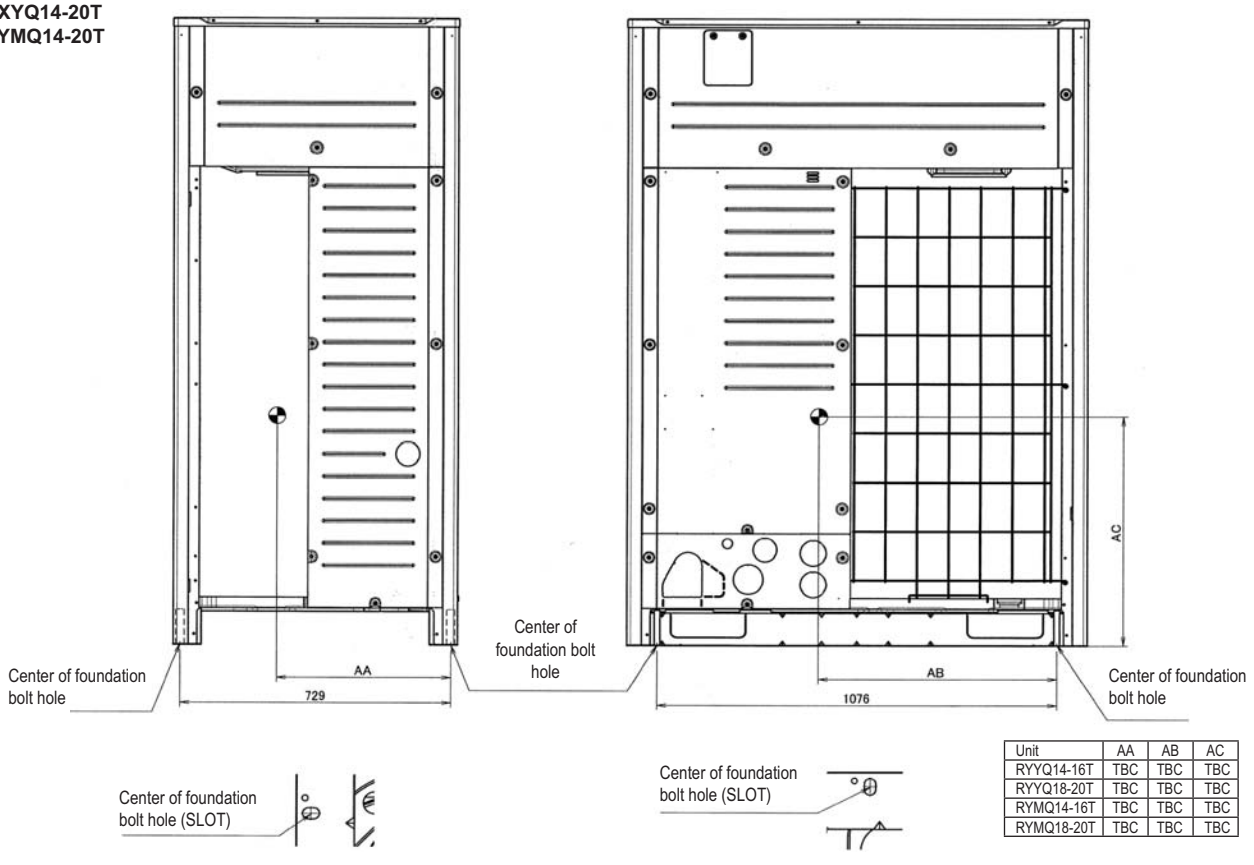
RYYQ8-12T
RXYQ8-12T
RYMQ8-12T



Unit	AA	AB	AC
RYYQ8-12T	328	366	565
RYMQ8-12T	354	443	565
RXYQ8-12T	339	448	565

3D079582

RYYQ14-20T
RXYQ14-20T
RYMQ14-20T



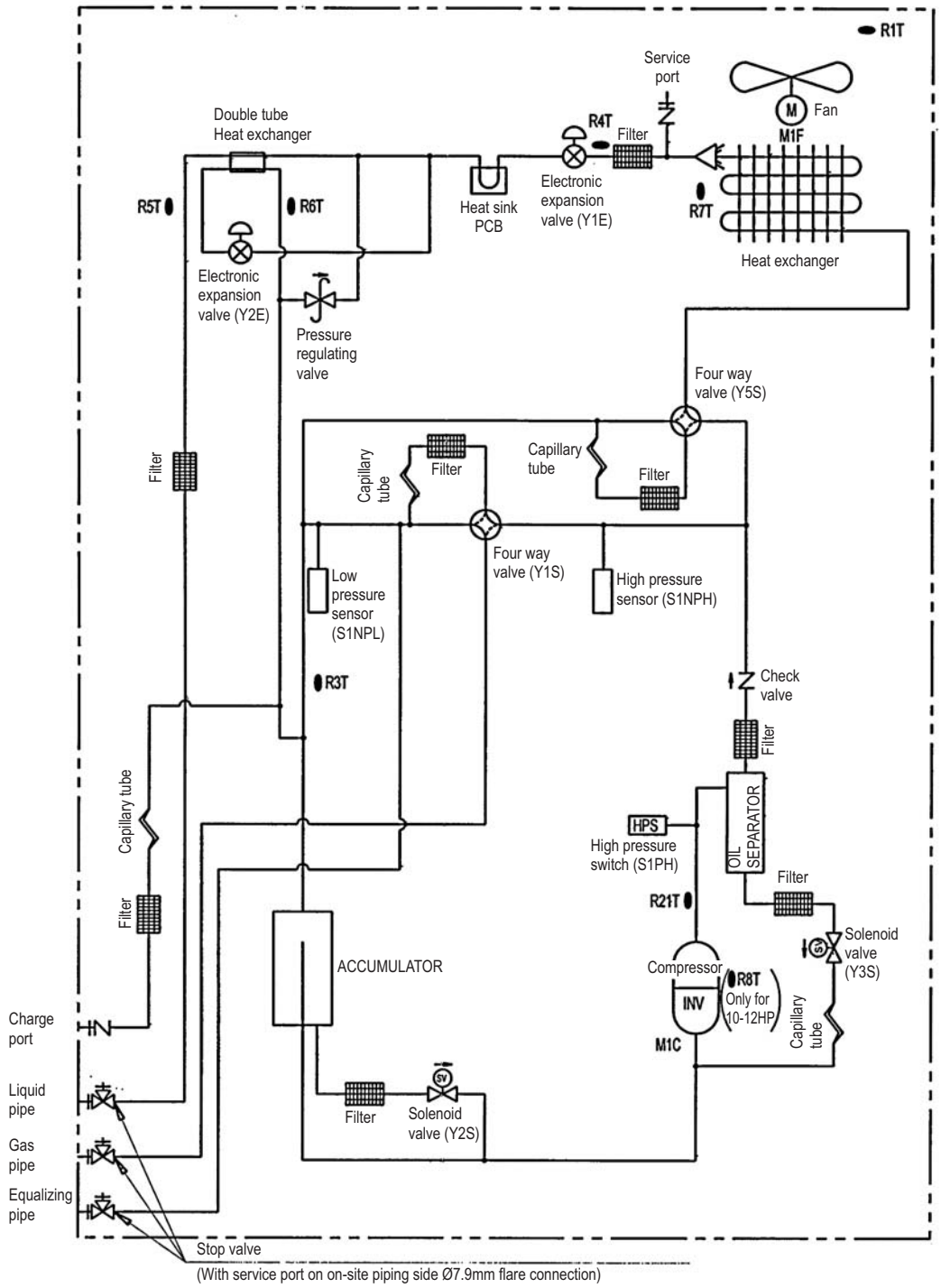
Unit	AA	AB	AC
RYYQ14-16T	TBC	TBC	TBC
RYYQ18-20T	TBC	TBC	TBC
RYMQ14-16T	TBC	TBC	TBC
RYMQ18-20T	TBC	TBC	TBC

3D079583

7 Piping diagrams

7 - 1 Piping Diagrams

RYMQ8-12T

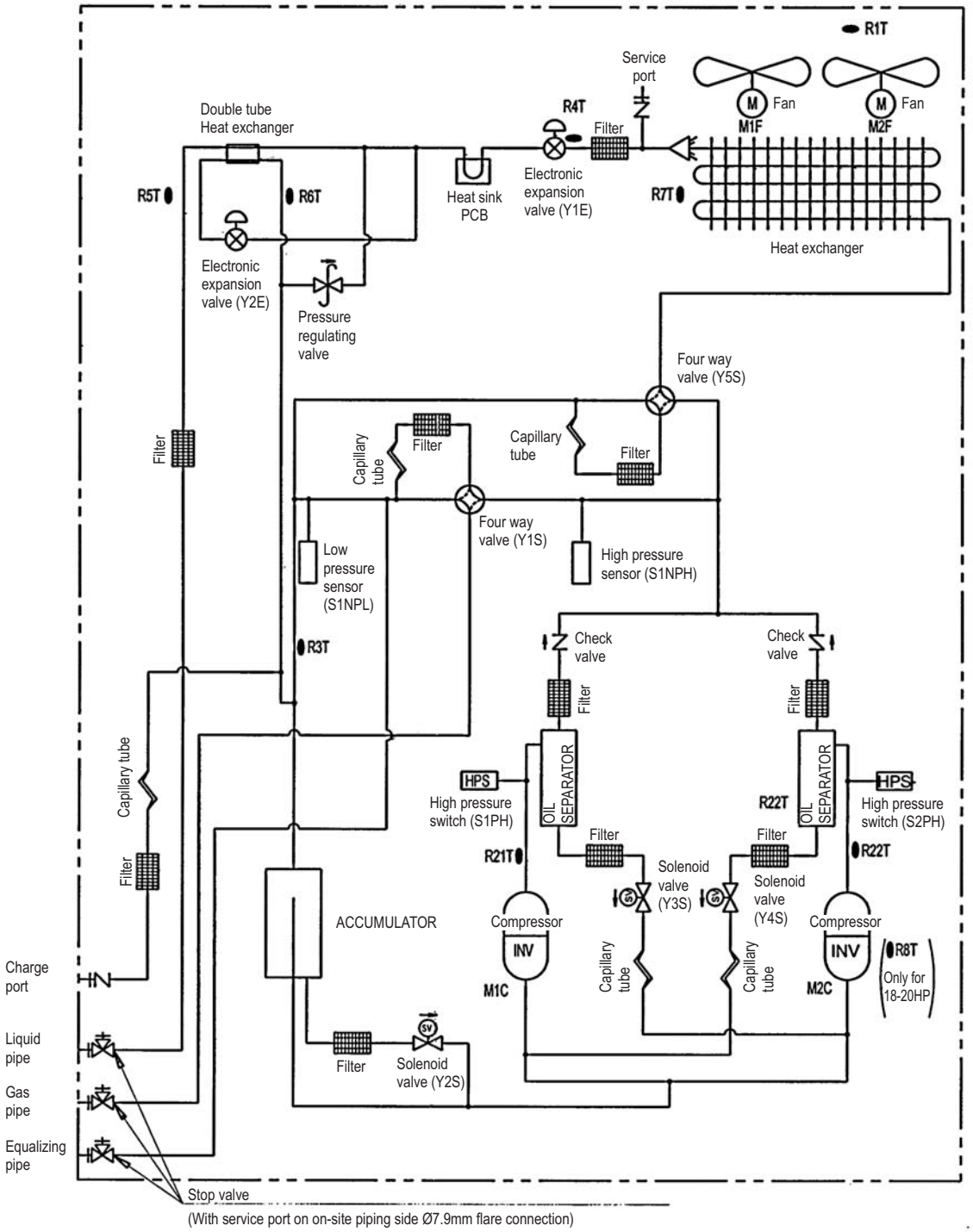


3D079554

7 Piping diagrams

7 - 1 Piping Diagrams

RYMQ14-20T

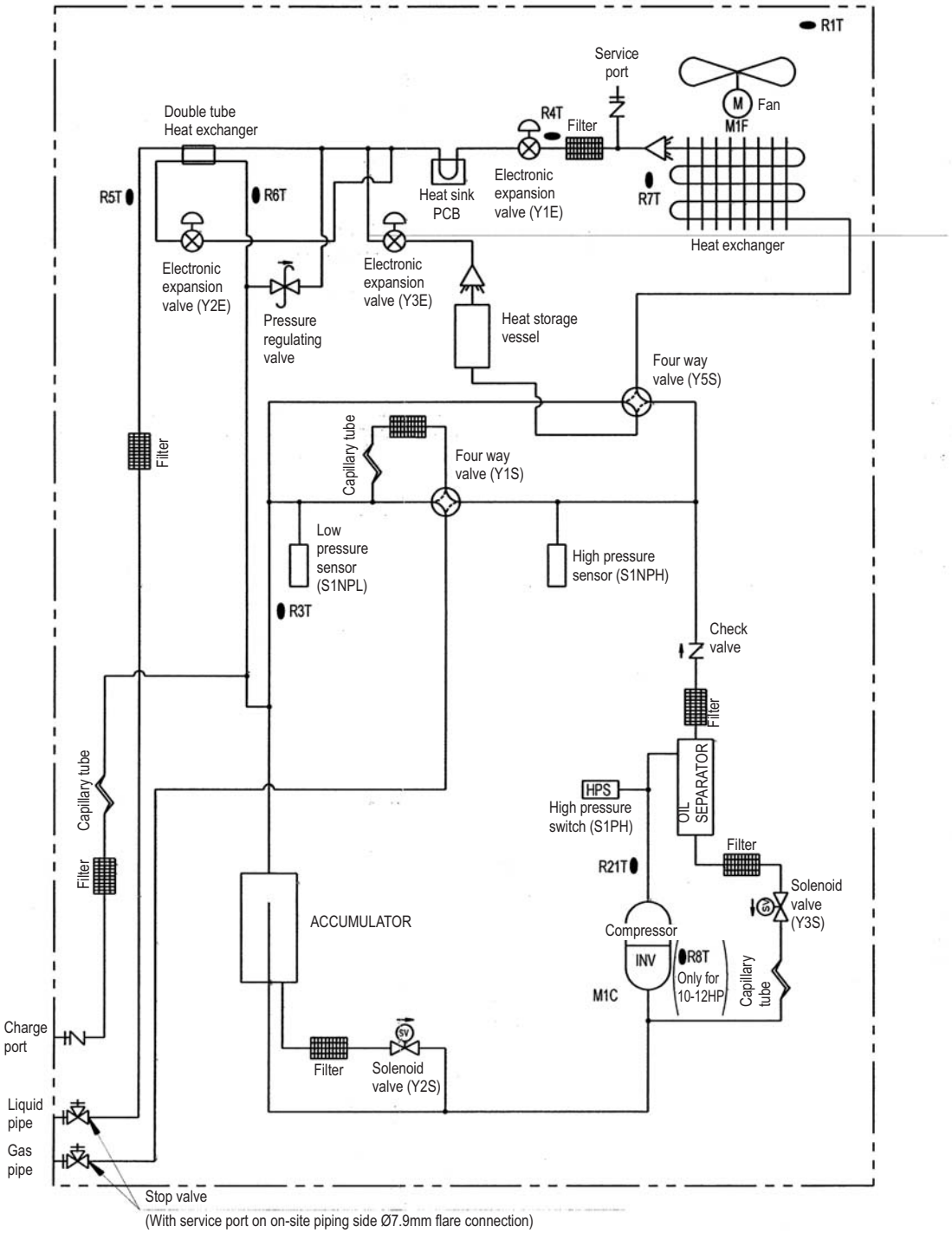


3D079555

7 Piping diagrams

7 - 1 Piping Diagrams

RYYQ8-12T

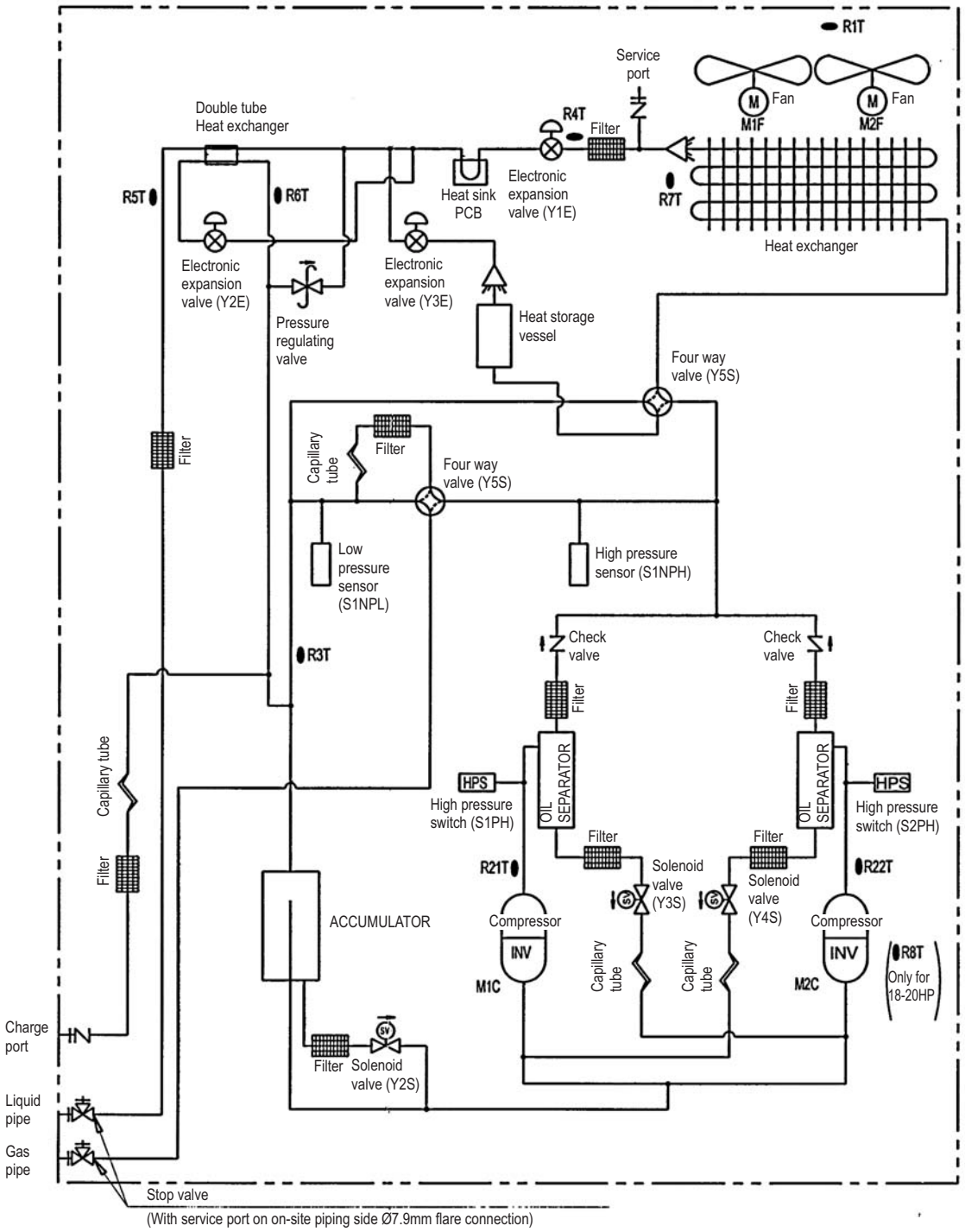


3D079552

7 Piping diagrams

7 - 1 Piping Diagrams

RYYQ14-20T

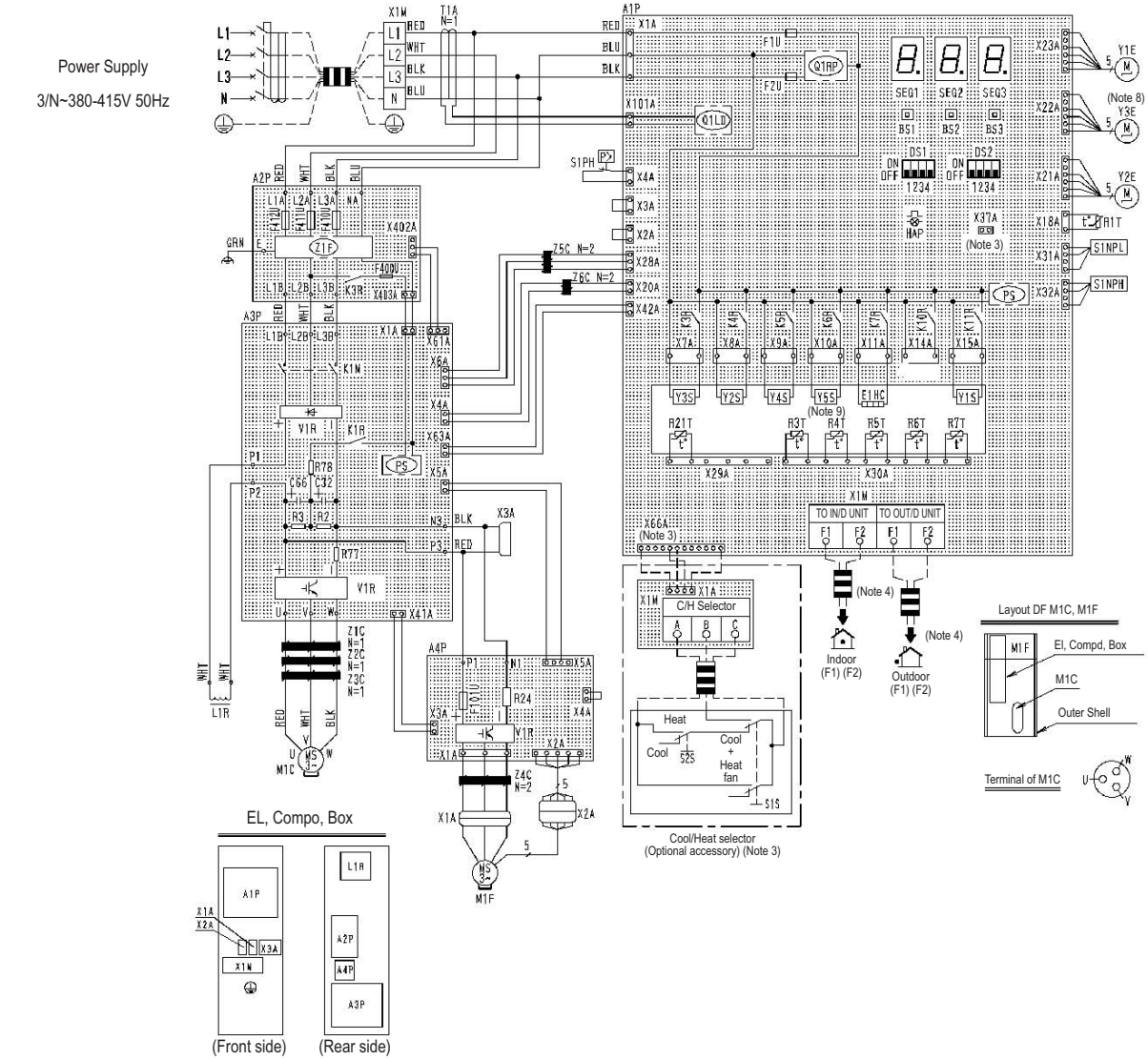


3D079553

8 Wiring diagrams

8 - 1 Wiring Diagrams - Three Phase

RYYQ8T / RYMQ8T



A1P	Printed circuit board (main	K11R	Magnetic relay (Y1S)	V1R	Power module (A3P) (A4P)
A2P	Printed circuit board (Noise filter)	L1R	Reactor	X1A, X2A	Connector (M1F)
A3P	Printed circuit board (Inv)	M1C	Motor (Compressor)	X3A	Connector (Check the residual charge)
A4P	Printed circuit board (Fan)	M1F	Motor (Fan)	X1M	Terminal strip (Power supply)
BS1~3	Push button switch (mode, set, return)	PS	Switching power supply (A1P, A3P)	X1M	Terminal strip (control) (AIP)
C32, C66	Capacitor (A3P)	Q1LD	Leakage detection circuit (A1P)	Y1E	Electronic expansion valve (main)
DS1, DS2	Dip switch	Q1RP	Phase reversal detect circuit (A1P)	Y2E	Electronic expansion valve (injection)
E1HC	Crankcase heater	R1T	Thermistor (A1R) (A1P)	Y3E	Electronic expansion valve (storage vessel) (Note 8)
F1U, F2U	Fuse (T, 3, 15A, 250V) (A1P)	R21T	Thermistor (MIC discharge)	Y1S	Solenoid valve (main)
F101U	Fuse (A4P)	R3T	Thermistor (Accumulator)	Y2S	Solenoid valve (Accumulator oil return)
F400U	Fuse (A2P)	R4T	Thermistor (Heat Exc. liq. pipe)	Y3S	Solenoid valve (Oil 1)
F410U~F412U	Fuse (A2P)	R5T	Thermistor (Subcool Liq. pipe)	Y4S	Solenoid valve (Oil 2)
HAP	Pilotlamp (Service monitor-green)	R6T	Thermistor (Heat Exc. gas pipe)	Y5S	Solenoid valve (Sub) (Note 9)
K1M	Magnetic relay (A3P)	R7T	Thermistor (Heat Exc. deicer)	Z1C~Z6C	Noise filter (Ferrite core)
K1R	Magnetic relay (A3P)	R2, R3, R78	Resistor (A3P)	Z1F	Noise filter (With surge absorber
K3R	Magnetic relay (A2P)	R24	Resistor (Current sensor) (A4P)		
K3R	Magnetic relay (Y3S)	R77	Resistor (Current limiting) (A3P)		
K4R	Magnetic relay (Y2S)	S1NPH	Pressure sensor (High)		
K5R	Magnetic relay (Y4S)	S1NPL	Pressure sensor (Low)	Connector for optional accessories	
K6R	Magnetic relay (Y5S)	S1PH	Pressure switch (High)	X14A	Connector (Drainpan heater)
K7R	Magnetic relay (E1HC)	SEG1~SEG3	7-Segment display	X37A	Connector (Power adapter)
K10R	Magnetic relay (Option)	T1A	Current sensor	X66A	Connector (Remote switching cool/heat selector)

NOTES

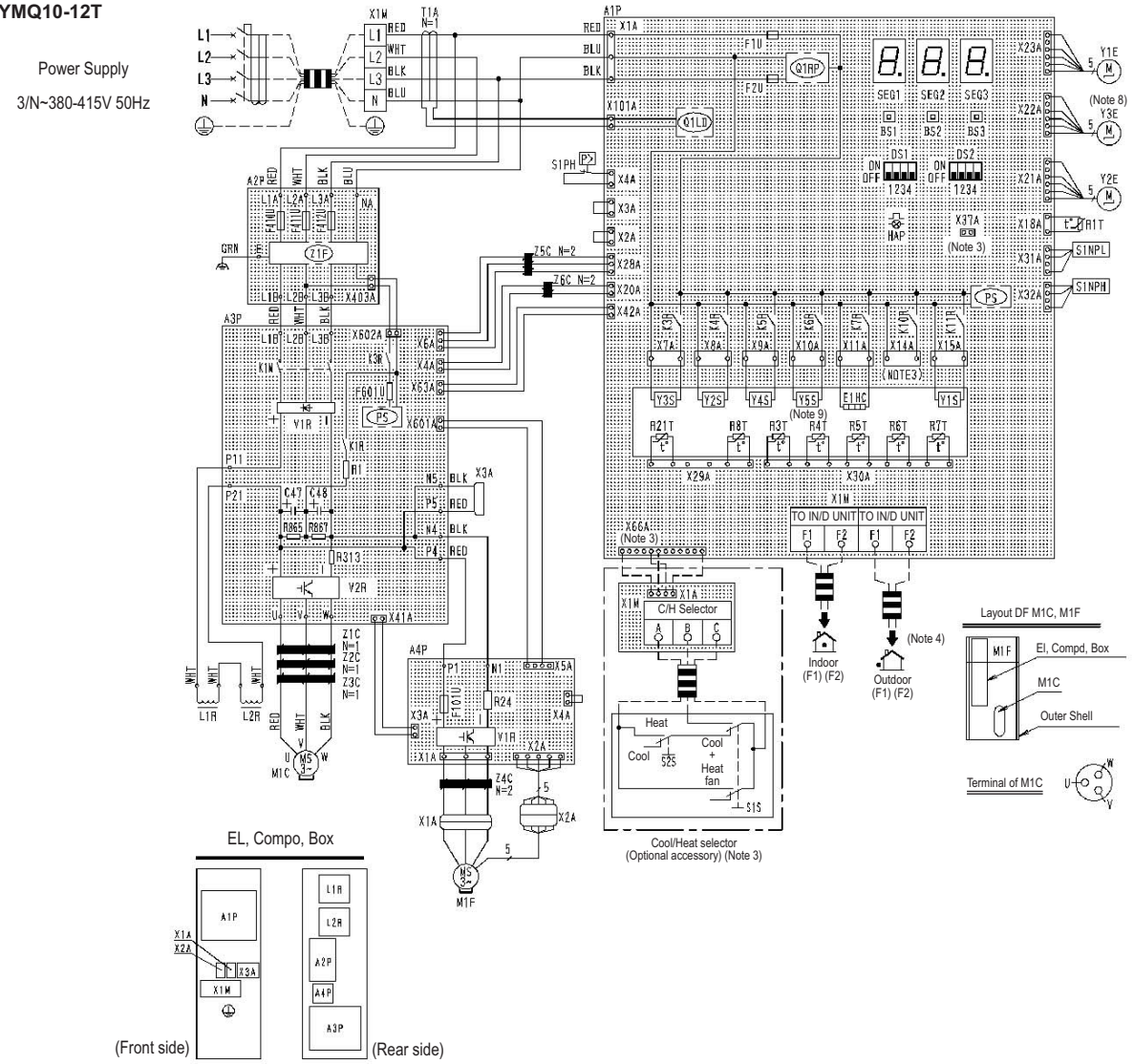
1. This wiring diagram applies to the outdoor unit
2. ▬▮▮▮▬ : field wiring, ▭▭▭▭ : terminal strip, ⊡⊡ : connector, —●—: Terminal ⏚ : protective earth (screw),
3. When using the optional adapter refer to the installation manual of the optional adapter.
4. For connection wiring to indoor-outdoor transmission F1 ● F2, outdoor-outdoor F1 ● F2, refer to the installatin manual.
5. How to use BS1~3 switch, refer to 'service precaution' label on el. compo box cover.
6. When operating, don't shortcircuit the protection device (S1PH).
7. Colors BLK: Black, RED: Red, BLU: Blue, WHT: White, GRN: Green.
8. Only for RYYQ model
9. Only for RYYQ/RYMQ Model.

3D079049A

8 Wiring diagrams

8 - 1 Wiring Diagrams - Three Phase

RYYQ10-12T
RYMQ10-12T



A1P	Printed circuit board (main	L1R, L2R	Reactor	T1A	Current sensor
A2P	Printed circuit board (Noise filter)	M1C	Motor (Compressor)	V1R	Power module (A3P) (A4P)
A3P	Printed circuit board (Inv)	M1F	Motor (Fan)	V2R	Diode module (A3P)
A4P	Printed circuit board (Fan)	PS	Switching power supply (A1P, A3P)	X3A	Connector (Check the residual charge)
BS1~3	Push button switch (mode, set, return)	Q1LD	Leakage detection circuit (A1P)	X1M	Terminal strip (Power supply)
C47, C48	Capacitor (A3P)	Q1RP	Phase reversal detect circuit (A1P)	X1M	Terminal strip (control) (AIP)
DS1, DS2	Dip switch	R1T	Thermistor (A1R) (A1P)	Y1E	Electronic expansion valve (main)
E1HC	Crankcase heater	R21T	Thermistor (MIC discharge)	Y2E	Electronic expansion valve (injection)
F1U, F2U	Fuse (T, 3, 15A, 250V) (A1P)	R3T	Thermistor (Accumulator)	Y3E	Electronic expansion valve (storage vessel) (Note 8)
F101U	Fuse (A4P)	R4T	Thermistor (Heat exc. liq. pipe)	Y1S	Solenoid valve (main)
F410U~F412U	Fuse (A2P)	R5T	Thermistor (Subcool liq. pipe)	Y2S	Solenoid valve (Accumulator oil return)
F601U	Fuse (A3P)	R6T	Thermistor (Heat exc. gas pipe)	Y3S	Solenoid valve (Oil 1)
HAP	Pilotlamp (Service monitor-green)	R7T	Thermistor (Heat exc. deicer)	Y4S	Solenoid valve (Oil 2)
K1M	Magnetic relay (A3P)	R8T	Thermistor (M2C Body)	Y5S	Solenoid valve (Sub) (Note 9)
K1R	Magnetic relay (A3P)	R1	Resistor (A3P)	Z1C~Z6C	Noise filter (Ferrite core)
K3R	Magnetic relay (Y3S) (A3P)	R24	Resistor (Current sensor) (A4P)	Z1F	Noise filter (With surge absorber
K4R	Magnetic relay (Y2S)	A313	Resistor (Current limiting) (A3P)		
K5R	Magnetic relay (Y4S)	A865, R867	Resistor (A3P)		
K6R	Magnetic relay (Y5S)	S1NPH	Pressure sensor (High)	Connector for optional accessories	
K7R	Magnetic relay (E1HC)	S1NPL	Pressure sensor (Low)	X14A	Connector (Drainpan heater)
K10R	Magnetic relay (Option)	S1PH	Pressure switch (High)	X37A	Connector (Power adapter)
K11R	Magnetic relay (Y1S)	SEG1~SEG3	7-Segment display	X66A	Connector (Remote switching cool/heat selector)

NOTES

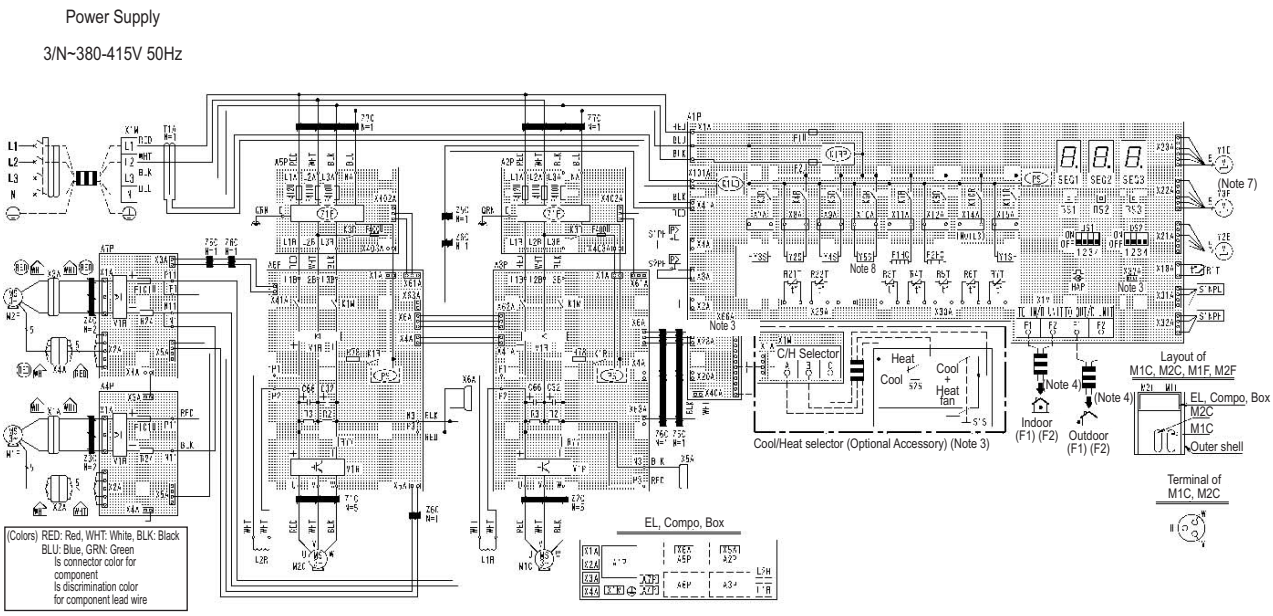
1. This wiring diagram applies to the outdoor unit
2. ▬▮▮▬: field wiring, □□□□: terminal strip, ⊙⊙: connector, —●—: Terminal ⏚: protective earth (screw),
3. When using the optional adapter refer to the installation manual of the optional adapter.
4. For connection wiring to indoor-outdoor transmission F1 ● F2, outdoor-outdoor transmission F1 ● F2, refer to the installatin manual.
5. How to use BS1~3 switch, refer to 'service precaution' label on el. compo box cover.
6. When operating, don't shortcircuit the protection device (S1PH).
7. Colors BLK: Black, RED: Red, BLU: Blue, WHT: White, GRN: Green.
8. Only for RYYQ model
9. Only for RYYQ/RYMQ Model.

3D079048A

8 Wiring diagrams

8 - 1 Wiring Diagrams - Three Phase

RYYQ14-16T
RYMQ14-16T



A1P	Printed circuit board (main	K11R	Magnetic relay (Y1S)	T1A	Current sensor
A2P, A5P	Printed circuit board (Noise filter)	L1R, L2R	Reactor	V1R	Power module (A3P, A6P)
A3P, A6P	Printed circuit board (Inv)	M1C, M2C	Motor (Compressor)	V1R	Power module (A4P, A7P)
A4P, A7P	Printed circuit board (Fan)	M1F, M2F	Motor (Fan)	X1A~4A	Connector (M1F, M2F)
BS1~3	Push button switch (mode, set, return)	PS	Switching power supply (A1P, A3P)	X5A, X6A	Connector (Check the residual charge)
C32, C66	Capacitor (A3P, A6P)	Q1LD	Leakage detection circuit (A1P)	X1M	Terminal strip (Power supply)
DS1, DS2	Dip switch	Q1RP	Phase reversal detect circuit (A1P)	X1M	Terminal strip (Control) (A1P)
E1HC, E2HC	Crankcase heater	R2, R3	Resistor (A3P, A6P)	Y1E	Electronic expansion valve (Main)
F1U, F2U	Fuse (T, 3, 15A, 250V) (A1P)	R24	Rsistor (Current sensor) (A4P, A7P)	Y2E	Electronic expansion valve (Injection)
F101U	Fuse (A4P, A7P)	R77	Resistor (Current limiting) (A3P, A6P)	Y3E	Electronic expansion valve (storage vessel) (Note 7)
F400U	Fuse (A2P, A5P)	R78	Resistor (A3P, A6P)	Y1S	Solenoid valve (Main)
F410U~F412U	Fuse (A2P, A5P)	R1T	Thermistor (A1R) (A1P)	Y2S	Solenoid valve (Accumulator oil return)
HAP	Pilotlamp (Service monitor-green)	R21T, R22T	Thermistor (M1C, M2C Discharge)	Y3S	Solenoid valve (Oil 1)
K1M	Magnetic relay (A3P, A6P)	R3T	Thermistor (Accumulator)	Y4S	Solenoid valve (Oil 2)
K1R	Magnetic relay (A3P, A6P)	R4T	Thermistor (Heat Exc. Liq. Pipe)	Y5S	Solenoid valve (Sub) (Note 8)
K3R	Magnetic relay (Y3S) (A2P, A5P)	R5T	Thermistor (Subcool Liq. Pipe)	Z1C~Z7C	Noise filter (Ferrite core)
K4R	Magnetic relay (Y2S)	R6T	Thermistor (Heat Exc. Gas Pipe)	Z1F	Noise filter (With surge absorber
K5R	Magnetic relay (Y4S)	R7T	Thermistor (Heat Exc. Deicer)		
K6R	Magnetic relay (Y5S)	S1NPH	Pressure sensor (High)	Connector for optional accessories	
K7R	Magnetic relay (E1HC)	S1NPL	Pressure sensor (Low)	X14A	Connector (Drainpan heater)
K8R	Magnetic relay (E2HC)	S1PH, S2PH	Pressure switch (High)	X37A	Connector (Power adapter)
K10R	Magnetic relay (Option)	SEG1~SEG3	7-Segment display	X66A	Connector (Remote switching cool/heat selector)

NOTES

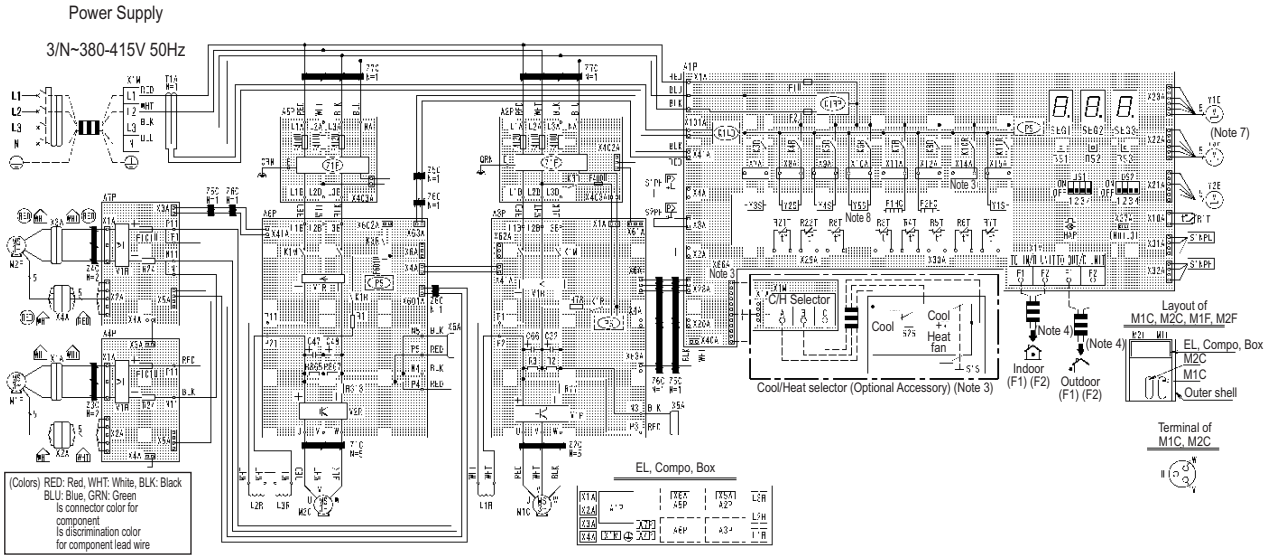
1. This wiring diagram applies only to the outdoor unit
2. ▬▮▮▮▬: field wiring, ☐☐☐☐: terminal strip, ⊙⊙: connector, —●—: Terminal ⏚: protective earth (screw),
3. When using the optional adapter refer to the installation manual of the optional adapter.
4. For connection wiring to indoor-outdoor transmission F1 ● F2, outdoor-outdoor transmission F1 ● F2, refer to the installation manual.
5. How to use BS1~3 switch, refer to 'service precaution' label on el. compo box cover.
6. When operating, don't shortcircuit the protection device (S1PH, S2PH).
7. Only for RYYQ model
8. Only for RYYQ/RYMQ Model.

2D078886B

8 Wiring diagrams

8 - 1 Wiring Diagrams - Three Phase

RYYQ18-20T
RYMQ18-20T



A1P	Printed circuit board (main	L1R~L3R	Reactor	T1A	Current sensor
A2P, A5P	Printed circuit board (Noise filter)	M1C, M2C	Motor (Compressor)	V1R	Power module (A3P, A6P)
A3P, A6P	Printed circuit board (Inv)	M1F, M2F	Motor (Fan)	V1R	Power module (A4P, A7P)
A4P, A7P	Printed circuit board (Fan)	PS	Switching power supply (A1P, A3P, A6P)	V2R	Power module (A3P)
BS1~3	Push button switch (mode, set, return)	Q1LD	Leakage detection circuit (A1P)	X1A~4A	Connector (M1F, M2F)
C32, C66	Capacitor (A3P)	Q1RP	Phase reversal detect circuit (A1P)	X5A, X6A	Connector (Check the residiual charge)
C47, C48	Capacitor (A6P)	R1	Thermistor (A6P)	X1M	Terminal Strip (Power supply)
DS1, DS2	Dip switch	R2, R3	Resistor (A3P)	X1M	Terminal Strip (Control) (A1P)
E1HC, E2HC	Crankcase heater	R24	Resistor (Current sensor) (A4P, A7P)	Y1E	Electronic expansion valve (Main)
F1U, F2U	Fuse (T, 3, 15A, 250V) (A1P)	R77	Resistor (Current Limiting) (A3P)	Y2E	Electronic expansion valve (Injection)
F101U	Fuse (A4P, A7P)	R78	Resistor (A3P)	Y3E	Electronic expansion alve (Storage vessel) (Note7)
F400U	Fuse (A2P)	R313	Resistor (Current Limiting) (A6P)	Y1S	Solenoid valve (Main)
F410U~F412U	Fuse (A2P, A5P)	R865, R867	Resistor (A6P)	Y2S	Solenoid valve (Accumulator oil return)
F601U	Fuse (A6P)	R1T	Thermistor (A1R) (A1P)	Y3S	Solenoid valve (Oil 1)
HAP	Pilotlamp (Service monitor-green)	R21T, R22T	Thermistor (M1C, M2C Discharge)	Y4S	Solenoid valve (Oil 2)
K1M	Magnetic Contactor (A3P, A6P)	R3T	Thermistor (Accumulator)	Y5S	Solenoid valve (Sub) (Note 8)
K1R	Magnetic relay (A3P, A6P)	R4T	Thermistor (Heat, Exc. Liq. Pipe)	Z1C~Z7C	Noise filter (Ferrite core)
K3R	Magnetic relay (Y3S) (A2P, A6P)	R5T	Thermistor (Subcool Liq. Pipe)	Z1F	Noise filter (With surge absorber)
K4R	Magnetic relay (Y2S)	R6T	Thermistor (Heat Exc. Gas Pipe)		
K5R	Magnetic relay (Y4S)	R7T	Thermistor (Heat Ecx. Deicer)	Connector for optional accessories	
K6R	Magnetic relay (Y5S)	R8T	Thermistor (M2C Body)	X14A	Connector (Drainpan heater)
K7R	Magnetic relay (E1HC)	S1NPH	Pressure sensor (High)	X37A	Connector (Power adapter)
K8R	Magnetic relay (E2HC)	S1NPL	Pressure sensor (Low)	X66A	Connector (Remote switching cool/heat selector
K10R	Magnetic relay (Option)	S1PH, S2PH	Pressure switch (High)		
K11R	Magnetic relay (Y1S)	SEG1~SEG3	7-Segment Display		

NOTES

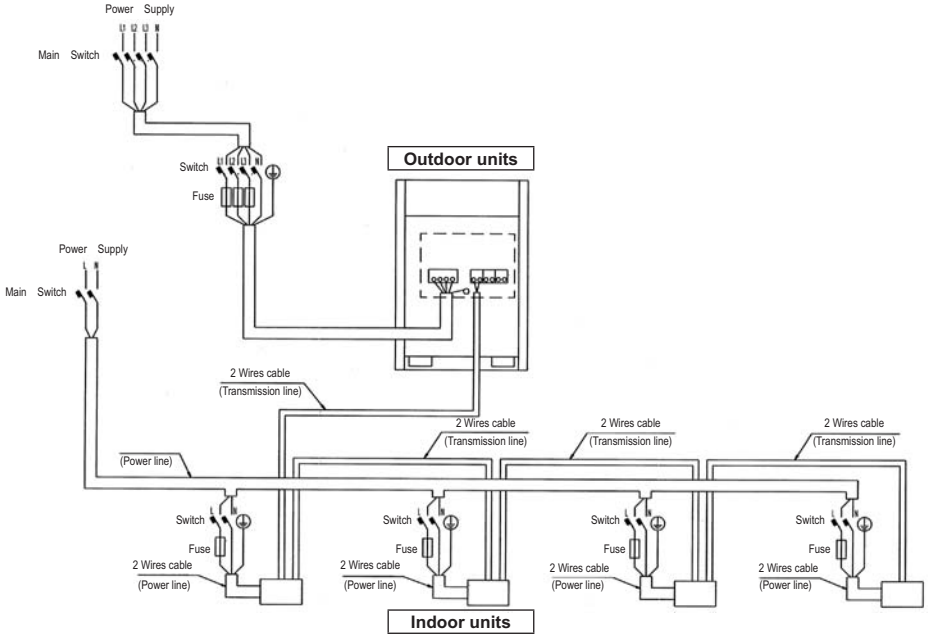
1. This wiring diagram applies only to the outdoor unit
2. ▬▮▮▬: field wiring, ☐☐☐☐: terminal strip, ⊡⊡: connector, —●—: Terminal ⏚: protective earth (screw),
3. When using the optional adapter refer to the installation manual of the optional adapter.
4. For connection wiring to indoor-outdoor transmission F1 ● F2, outdoor-outdoor transmission F1 ● F2, refer to the installation manual.
5. How to use BS1~3 switch, refer to 'service precaution' label on EL, Compo, Box Cover.
6. When operating, don't shortcircuit the protection device (S1PH, S2PH).
7. Only for RYYQ model
8. Only for RYYQ/RYMQ Model.

2D078885B

9 External connection diagrams

9 - 1 External Connection Diagrams

RXYQ8-20T
RYYQ8-20T

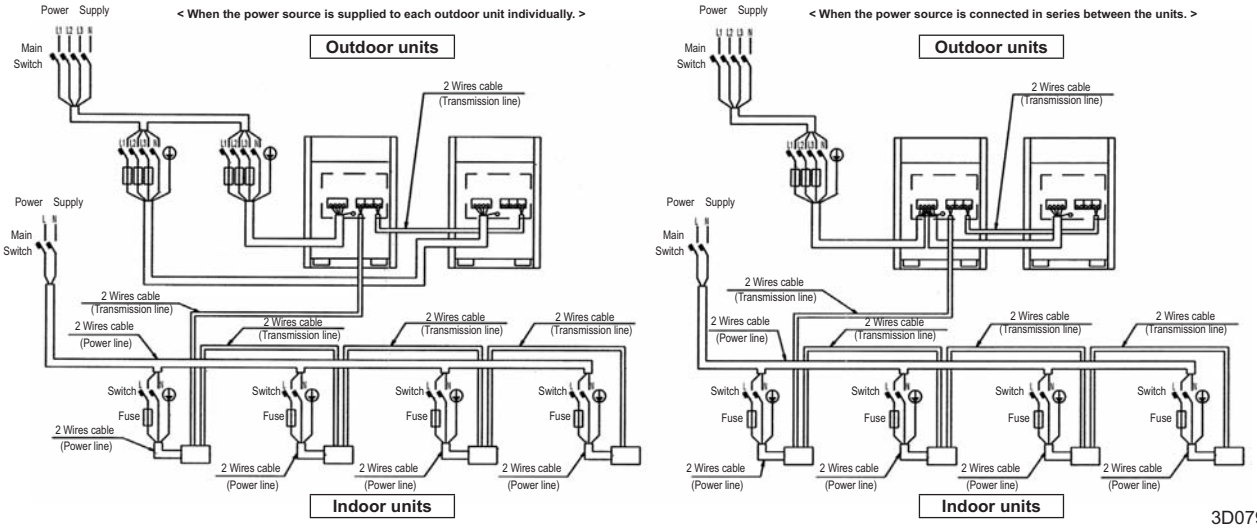


3D079576

NOTES

1. All wiring, components and materials to be procured on the site must comply with the applicable local and national codes.
2. Use copper conductors only.
3. As for details, see wiring diagram.
4. Install circuit breaker for safety.
5. All field wiring and components must be provided by licensed electrician.
6. Unit shall be grounded in compliance with the applicable local and national codes.
7. Wiring shown are general points-of-connection guides only and are not intended for or to include all details for a specific installation.
8. Be sure to install the switch and the fuse to the power line of each equipement.
9. Install the main switch that can interrupt all the power sources in an integrated manner because this system consists of the equipment utilizing the multiple power sources.
10. If there exists the possibility of reversed phase, lose phase, momentary blackout or the power goes on and off while the product is operating, attach a reversed phase protection circuit locally. Running the product in reversed phase may break the compressor and other parts.
11. Must install earth leakage circuit breaker.

RXYQ22-36T
RYYQ22-36T



3D079577

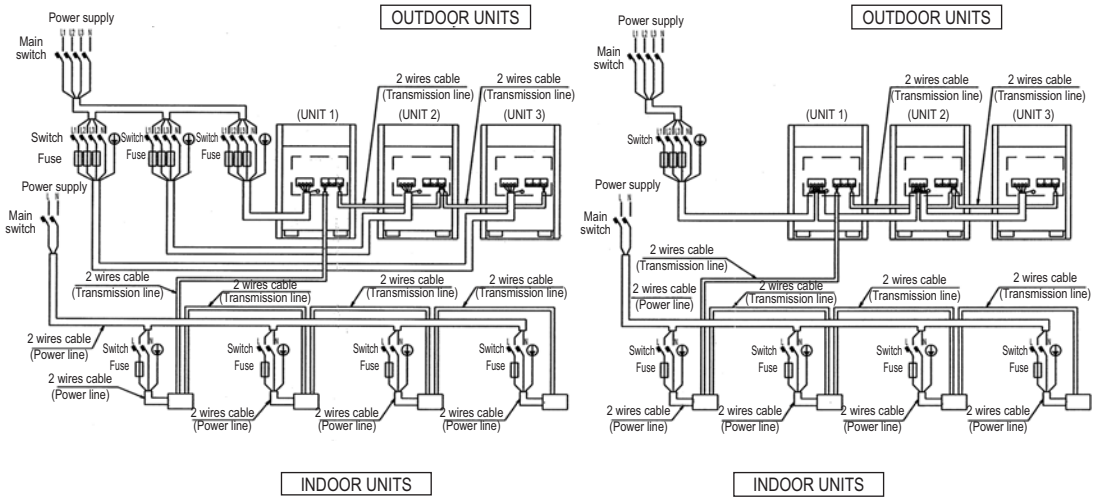
NOTES

1. All wiring, components and materials to be procured on the site must comply with the applicable local and national codes.
2. Use copper conductors only.
3. As for details, see wiring diagram.
4. Install circuit breaker for safety.
5. All field wiring and components must be provided by licensed electrician.
6. Unit shall be grounded in compliance with the applicable local and national codes.
7. Wiring shown are general points-of-connection guides only and are not intended for or to include all details for a specific installation.
8. Be sure to install the switch and the fuse to the power line of each equipement.
9. Install the main switch that can interrupt all the power sources in an integrated manner because this system consists of the equipment utilizing the multiple power sources.
10. the capacity of UNIT1 must be larger than UNIT2 when the power source is connected in series between the units.
11. If there exists the possibility of reversed phase, lose phase, momentary blackout or the power goes on and off while the product is operating, attach a reversed phase protection circuit locally. Running the product in reversed phase may break the compressor and other parts.
12. Must install earth leakage circuit breaker.

9 External connection diagrams

9 - 1 External Connection Diagrams

RYYQ38-54T <When the power source is supplied to each outdoor unit individaully> <When the power sourse is connected in series between the units>



3D079578

NOTES

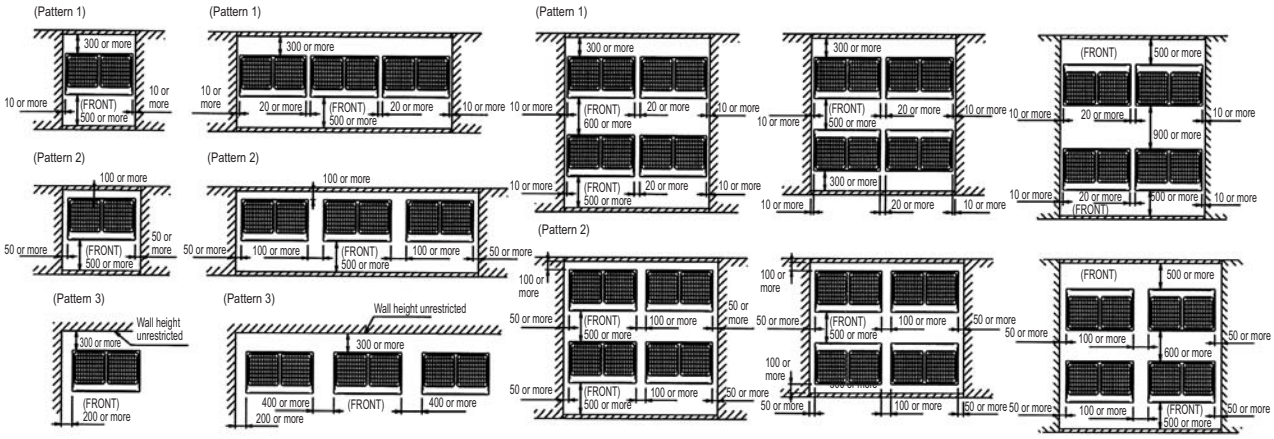
1. All wiring, components and materials to be produced on the site must comply with the applicable local and national codes.
2. Use copper conductors only.
3. As for details, see wiring diagram.
4. Install circuit breaker for safety.
5. All field wiring and components must be provided by licensed electrician.
6. Unit shall be grounded in compliance with the applicable local and national codes.
7. Wiring shown are general points-of-connection guides only and are nog intended for or to include all details for a specific installation.
8. Be sure to install the switch and the fuse to the power line of each equipement.
9. Install the main switch that can interrupt all the power sources in an integrated manner because this system consists of the equipment utilizing the multiple power sources.
10. The capacity of UNIT1 must be larger than UNIT2 when the power source is connected in series between the units.
11. If there exists the possibility of reversed phase, lose phase, momentary blackout or the power goes on and off while the product is operating, attach a reversed phase protection circuit locally. Running the product in reversed phase may break the compressor and other parts.
12. Must install earth leakage circuit breaker.

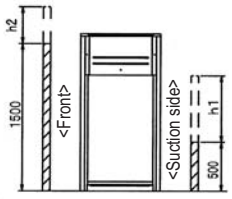
10 Installation

10 - 1 Installation Method

RYYQ-T
RXYQ-T
RYMQ-T

For single unit installation | For installation in rows | For centralized group layout





NOTES

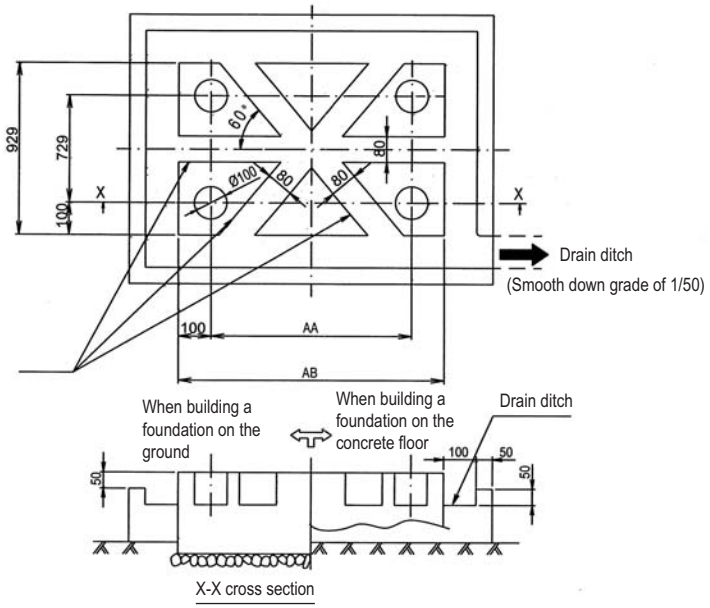
1. Heights of walls in case of patterns 1 and 2:
   Front: 1500mm
   Suction side: 500mm
   Side: Height unrestricted
   Installation space as shown on this drawing is based on the cooling operation at 35 degrees outdoor air temperature.
   When the design outdoor air temperature exceeds 35 degrees or the load exceeds maximum ability of much generation load of heat in all outdoor unit, take the suction side space more broadly than the space as shown on this drawing.
2. If the above wall heights are exceeded then h2/2 and h1/2 should be added to the front and suction side service spaces respectively as shown in the figure on the right.
3. When installing the units most appropriate pattern should be selected from those shown above in order to obtain the best fit in the space available. Always keep in mind the need to leave enough space for a person to pass between units and wall and also for the air to circulate freely.
   (If more units are to be installed than are catered for in the above patterns your layout should take account of the possibility of short circuits).
4. The units should be installed to leave sufficient space at the front for the on site refrigerant piping work to be carried out comfortably.

3D079542

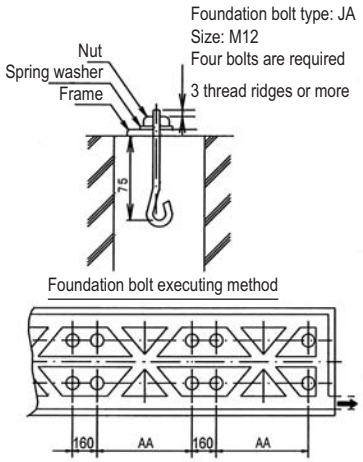
10 Installation

10 - 2 Fixation and Foundation of Units

RYYQ-T
RXYQ-T
RYMQ-T



X-X cross section



Foundation bolt executing method

When installing multiple units in connection

Model	AA	AB
RYYQ8-12T RYMQ8-12T RXYQ8-12T	766	697
RYYQ14-20T RYMQ14-20T RXYQ14-20T	1076	1302

NOTES

1. The proportions of cement: sand: gravel for the concrete shall be 1:2:4 and the reinforcement bars with a diameter of 10mm (approx, 300mm intervals) shall be placed.
2. The surface shall be finished with mortar. The corner edges shall be chamfered.
3. When the foundation is built on a concrete floor, rubble is not necessary, however, the surface of the section on wich the foundation is built shall have a rough finish.
4. A drain ditch shall be made around the foundation to thoroughly drain water from the equipment installation area.
5. When installing the equipment on a roof, the floor shall be checked, and water-proofing measures shall be taken.

3D079547

10 Installation

10 - 3 Refrigerant Pipe Selection

RYYQ-T
RXYQ-T
RYMQ-T

Reference drawing see next page		Maximum piping lenght			Maximum heigh difference			Total Piping Length
		Longest pipe (A+[B,G,E,J]) Actual / (Equivalent)	After first branch (B,G,E,J) Actual	After first branch for outdoor multi (D) Actual / (Equivalent)	Indoor to outdoor [3] (H1)	Indoor to indoor [3] (H2)	Outdoor to outdoor [3] (H3)	
Standard Only VRV DX indoor connected Standard multi combination		165/(190)m	40m[1]	10/(13)m	50/40m[3]	30m	5m	1000m
Free multi combination (=all, except standard multi combination)		135/(160)m	40m[1]	10/(13)m	50/40m[3]	30m	5m	500m
Hydrobox connection		135/(160)m	40m	10/(13)m	50/40m	15m	5m	300-500m[5]
RA connection		100/(120)m	50m[2]	-	50/40m	15m	-	250m
AHU connection	Pair	50/(55)m[4]	-	-	40/40m	-	-	-
	Multi	165/(190)m	40m	10/13m	40/40m	15m	5m	1000m
	Mix[6]	165/(190)m	40m	10/13m	40/40m	15m	5m	1000m

NOTES

For standard multi combinations; see 3D079534

(1) Extension is possible if all below conditions are met (limitation can be extended up to 90m)
- a. The piping length between all indoor to the nearest branch kit is ≤ 40m.
- b. It is necessary to increase the pipe size of the gas and liquid piping if the pipe length between the first and the final branch kit is over 40m. If the increased pipe size is larger than the pipe size of the main pipe, then the pipe size of the main pipe has to be increased as well.
- c. When the piping size is increased (b), the piping length has to be counted as double. The total piping length has to be within limitations (see table above).
- d. The piping length difference between the nearest indoor from first branch to the outdoor unit and farthest indoor to the outdoor unit is ≤ 40m.

(2) If the piping length between the first branch and BP box or VRV indoor is over 20m, it's necessary to increase the gas and liquid piping size between first branch and BP box or VRV indoor.

(3) Extension up till 90m is possible without additional option kit.
- → In case the outdoor location is higher than indoor: extension is possible up till 90m under following conditions:
  - Liquid piping size up (details in installation manual).
  - Dedicated setting on outdoor unit is required (details in installation manual).
- → In case the outdoor location is lower than indoor: extension is possible up till 90m under following conditions:
  - 40~60m: minimum connection ratio connected: 80%.
  - 60~65m: minimum connection ratio connected: 90%.
  - 65~80m: minimum connection ratio connected: 100%.
  - 80~90m: minimum connection ratio connected: 110%.
  - +
  - Liquid piping size up (details in installation manual).
  - Dedicated setting on outdoor unit is required (details in installation manual).

(4) The allowable minimum length is 5m.

(5) In case of multi connection.

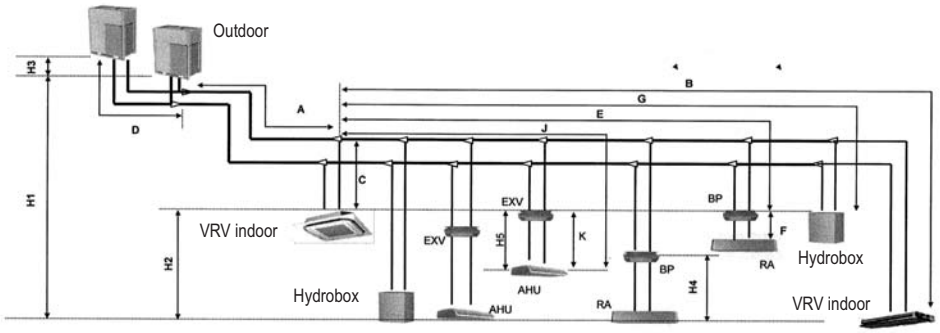
(6) Mix of AHU and VRV DX indoor

3D079540

10 Installation

10 - 3 Refrigerant Pipe Selection

RYYQ-T
RXYQ-T
RYMQ-T



REMARKS

1. Schematic indication: illustrations may vary from real unit outlook.
2. Displayed system is only to illustrate piping length limitations. Combination of displayed indoor unit types is not allowed. See 3D079543 for allowed combinations.

		Allowable piping length		Max. height difference	
		BP to RA (F)	EXV to AHU (K)	BP to RA (H4)	EXV to AHU (H5)
RA connection		2~15m	-	5m	-
AHU connection	Pair	-	≤5m	-	5m
	Multi (1)	-	≤5m	-	5m
	Mix	-	≤5m	-	5m

REMARKS

1. Mix of AHU and VRV DX indoor

3D079540

RYYQ-T
RXYQ-T
RYMQ-T

System pattern Allowed connection ratio (CR). * Other combinations are N.A.	Total		Allowable capacity			
	capacity	Indoor unit quantity (VRV, RA, ALU, Hydrobox) (excl. BP box and EXV kits)	VRV Indoor	RA indoor	Hydrobox	AHU
Only VRV indoor	50~130%	Max. 64	-	-	-	-
VRV Indoor + RA indoor	80~130%	Max. 32[2]	0~130%	0~130%	-	-
Only RA indoor	80~130%	Max. 32[2]	80~130%	-	-	-
VRV indoor + LT hydro	50~130%	Max. 32[2]	50~130%	-	0~80%	-
VRV indoor + AHU	50~110%[4]	Max. 64[3]	50~110%	-	-	0~110%
Only AHU	90~110%[4]	Max. 64[3]	-	-	-	90~110%

NOTES

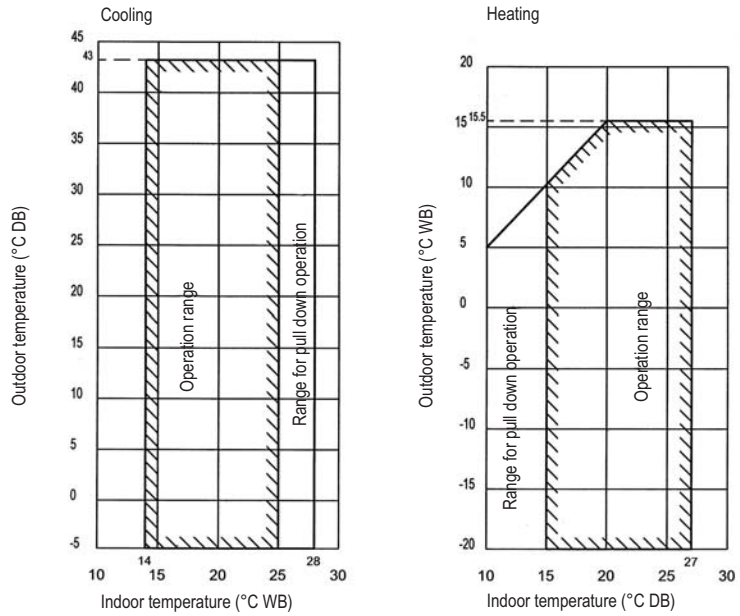
2. There is no restriction for the number of connectable BP boxes.
3. When using AHU connection: see EKEXV kit as an indoor unit for counting the total number of indoor units
4. Restrictions by air handling unit capacity

3D079540

11 Operation range

11 - 1 Operation Range

RYYQ-T
RXYQ-T
RYMQ-T



NOTES

1. These figures assume the following operation conditions:
   Indoor and outdoor units:
   Equivalent pipe length: 5m
   Level difference: 0m
2. Depending on operation and installation conditions, the indoor unit can change over to freeze-up operation (indoor de-icing).
3. To reduce the freeze-up operation (indoor de-icing) frequency it is recommended to install the outdoor unit in a location not exposed to wind.
4. Operation range is valid in case direct expansion indoor units are used. In case special indoor units are used, (eg. Hydrobox), refer to technical specs of dedicaded unit.

3D079544

Daikin's unique position as a manufacturer of air conditioning equipment, compressors and refrigerants has led to its close involvement in environmental issues. For several years Daikin has had the intention to become a leader in the provision of products that have limited impact on the environment. This challenge demands the eco design and development of a wide range of products and an energy management system, resulting in energy conservation and a reduction of waste.

Daikin Europe N.V. participates in the Eurovent Certification programme for Air conditioners (AC), Liquid Chilling Packages (LCP) and Fan coil units (FCU), Check ongoing validity of certificate online: www.eurovent-certification.com or using: www.certiflash.com"

BARCODE

Daikin products are distributed by:

DAIKIN EUROPE N.V. Naamloze Vennootschap - Zandvoordestraat 300, B-8400 Oostende - Belgium - www.daikin.eu - BE 0412 120 336 - RPR Oostende

EEDEN113-200 • 08/12 • Copyright Daikin
The present publication supersedes EEDEN12-200